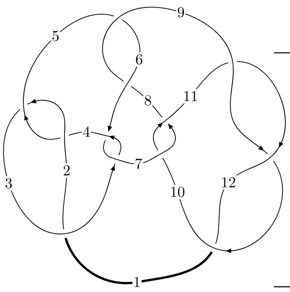
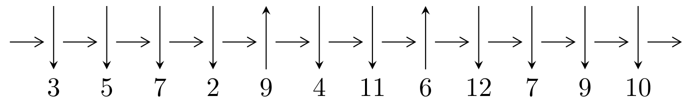
$12n_{0093}$ ($K12n_{0093}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

$$4,6 \xrightarrow[c_6]{} 7,11 \xrightarrow[c_7]{} 8 \xrightarrow[c_8]{} 9 \xrightarrow[c_{11}]{} 12 \xrightarrow[c_3]{} 3 \xrightarrow[c_5]{} 5 \xrightarrow[c_2]{} 2 \xrightarrow[c_1]{} 1 \xrightarrow[c_{10}]{} 10 \twoheadrightarrow c_4, c_9, c_{12}$$

Ideals for irreducible components[2] of $X_{\mathbf{par}}$

$$I_1^u = \langle 8.15753 \times 10^{41} u^{22} - 3.72668 \times 10^{42} u^{21} + \cdots + 7.71580 \times 10^{42} b + 1.17939 \times 10^{43},$$
$$1.10388 \times 10^{43} u^{22} - 4.86462 \times 10^{43} u^{21} + \cdots + 1.54316 \times 10^{43} a + 2.96744 \times 10^{44},\ u^{23} - 4u^{22} + \cdots - 36u +$$
$$I_2^u = \langle -u^8 + 2u^7 - 3u^6 + 3u^5 - 4u^4 + 4u^3 - 3u^2 + b + 2u - 1,$$
$$-3u^8 + 4u^7 - 8u^6 + 7u^5 - 13u^4 + 9u^3 - 11u^2 + a + 6u - 6,\ u^9 - u^8 + 2u^7 - u^6 + 3u^5 - u^4 + 2u^3 + u + 1\rangle$$
$$I_3^u = \langle -2u^2 a - au - u^2 + b - u,\ -2u^2 a + a^2 - au - 11u^2 - 2a - 5u - 19,\ u^3 + u^2 + 2u + 1\rangle$$

$$I_1^v = \langle a,\ 5v^2 + 7b - 49v + 11,\ v^3 - 10v^2 + 5v - 1\rangle$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 41 representations.

[1] The image of knot diagram is generated by the software "**Draw programme**" developed by Andrew Bartholomew(`http://www.layer8.co.uk/maths/draw/index.htm#Running-draw`), where we modified some parts for our purpose(`https://github.com/CATsTAILs/LinksPainter`).

[2] All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

I. $I^u_1 = \langle 8.16\times10^{41}u^{22}-3.73\times10^{42}u^{21}+\cdots+7.72\times10^{42}b+1.18\times10^{43},\ 1.10\times10^{43}u^{22}-4.86\times10^{43}u^{21}+\cdots+1.54\times10^{43}a+2.97\times10^{44},\ u^{23}-4u^{22}+\cdots-36u+8\rangle$

(i) Arc colorings

$$a_4 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_6 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_7 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-0.715334u^{22}+3.15238u^{21}+\cdots+69.0282u-19.2296\\-0.105725u^{22}+0.482993u^{21}+\cdots+14.9531u-1.52853\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-0.186391u^{22}+0.803680u^{21}+\cdots+9.92260u-5.79288\\-0.0258071u^{22}+0.120060u^{21}+\cdots+3.37054u-0.131649\end{pmatrix}$$
$$a_9 = \begin{pmatrix}-0.212198u^{22}+0.923740u^{21}+\cdots+13.2931u-5.92453\\-0.0258071u^{22}+0.120060u^{21}+\cdots+3.37054u-0.131649\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-0.576767u^{22}+2.56286u^{21}+\cdots+55.9572u-14.4153\\-0.115767u^{22}+0.522790u^{21}+\cdots+12.7973u-1.57836\end{pmatrix}$$
$$a_3 = \begin{pmatrix}u\\u^3+u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0.0635667u^{22}-0.259763u^{21}+\cdots-11.3894u+1.71111\\0.00786141u^{22}-0.0482210u^{21}+\cdots+1.53688u-0.150885\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-0.0506560u^{22}+0.189656u^{21}+\cdots+13.6327u-1.90596\\0.0232321u^{22}-0.108930u^{21}+\cdots+2.18167u-0.0911079\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-0.0557053u^{22}+0.211542u^{21}+\cdots+12.9263u-1.86199\\0.0193035u^{22}-0.0931377u^{21}+\cdots+1.57646u-0.0606498\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-0.714037u^{22}+3.15386u^{21}+\cdots+67.7812u-18.4298\\-0.108857u^{22}+0.493167u^{21}+\cdots+15.1831u-1.58195\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4.74869u^{22}+21.0543u^{21}+\cdots+605.964u-98.1244$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{23} + 23u^{22} + \cdots + 12783u + 1$
c_2, c_4	$u^{23} - 7u^{22} + \cdots - 113u - 1$
c_3, c_6	$u^{23} - 4u^{22} + \cdots - 36u + 8$
c_5, c_8	$u^{23} + 3u^{22} + \cdots - 32u - 64$
c_7, c_{10}	$u^{23} + 5u^{22} + \cdots + 4608u - 512$
c_9, c_{11}, c_{12}	$u^{23} - 14u^{22} + \cdots + 247u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{23} - 39y^{22} + \cdots + 163240279y - 1$
c_2, c_4	$y^{23} - 23y^{22} + \cdots + 12783y - 1$
c_3, c_6	$y^{23} - 12y^{22} + \cdots + 7568y - 64$
c_5, c_8	$y^{23} + 37y^{22} + \cdots + 234496y - 4096$
c_7, c_{10}	$y^{23} - 111y^{22} + \cdots + 71041024y - 262144$
c_9, c_{11}, c_{12}	$y^{23} - 48y^{22} + \cdots + 59963y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.810706 + 0.505931I$ $a = -0.375875 - 0.573416I$ $b = -0.094068 - 0.572082I$	$-0.87687 + 1.52898I$	$-6.60742 - 3.54271I$
$u = -0.810706 - 0.505931I$ $a = -0.375875 + 0.573416I$ $b = -0.094068 + 0.572082I$	$-0.87687 - 1.52898I$	$-6.60742 + 3.54271I$
$u = -0.273102 + 1.253150I$ $a = 0.905694 + 0.280329I$ $b = -1.78345 - 1.11930I$	$2.20419 + 2.68521I$	$2.70136 + 6.44368I$
$u = -0.273102 - 1.253150I$ $a = 0.905694 - 0.280329I$ $b = -1.78345 + 1.11930I$	$2.20419 - 2.68521I$	$2.70136 - 6.44368I$
$u = -0.282905 + 0.561433I$ $a = 0.025171 + 0.255386I$ $b = 0.116102 - 1.176160I$	$1.45854 + 3.25209I$	$-3.51442 - 11.82565I$
$u = -0.282905 - 0.561433I$ $a = 0.025171 - 0.255386I$ $b = 0.116102 + 1.176160I$	$1.45854 - 3.25209I$	$-3.51442 + 11.82565I$
$u = 0.904186 + 1.051940I$ $a = -0.346587 - 0.098446I$ $b = -0.141661 + 0.415462I$	$-5.12106 - 6.15902I$	$-10.50715 + 1.63362I$
$u = 0.904186 - 1.051940I$ $a = -0.346587 + 0.098446I$ $b = -0.141661 - 0.415462I$	$-5.12106 + 6.15902I$	$-10.50715 - 1.63362I$
$u = 0.603575$ $a = 4.66294$ $b = 0.0529154$	-9.92701	35.8110
$u = -0.518673$ $a = 1.24139$ $b = 0.270054$	-1.19404	-8.40790

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.271589 + 0.441556I$ $a = 0.17891 - 4.69126I$ $b = -0.423841 + 0.717638I$	$-2.85899 + 0.09109I$	$-11.2448 - 8.7640I$
$u = -0.271589 - 0.441556I$ $a = 0.17891 + 4.69126I$ $b = -0.423841 - 0.717638I$	$-2.85899 - 0.09109I$	$-11.2448 + 8.7640I$
$u = -0.439625$ $a = -12.6495$ $b = -2.20680$	-2.87501	-99.4720
$u = 0.0940545$ $a = -7.89489$ $b = 0.510696$	-1.10354	-8.74790
$u = 1.16222 + 1.51464I$ $a = -0.789835 + 0.935119I$ $b = -0.43899 - 2.10734I$	$15.7088 - 13.9110I$	$-11.35191 + 5.40734I$
$u = 1.16222 - 1.51464I$ $a = -0.789835 - 0.935119I$ $b = -0.43899 + 2.10734I$	$15.7088 + 13.9110I$	$-11.35191 - 5.40734I$
$u = -1.41200 + 1.76863I$ $a = -0.536030 - 0.772744I$ $b = -0.24550 + 2.28839I$	$19.7178 + 6.1351I$	0
$u = -1.41200 - 1.76863I$ $a = -0.536030 + 0.772744I$ $b = -0.24550 - 2.28839I$	$19.7178 - 6.1351I$	0
$u = 2.39957 + 0.70874I$ $a = 0.624715 - 0.384715I$ $b = 0.36478 + 1.74735I$	$-14.2988 - 3.5584I$	0
$u = 2.39957 - 0.70874I$ $a = 0.624715 + 0.384715I$ $b = 0.36478 - 1.74735I$	$-14.2988 + 3.5584I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-2.52063$ $a=\ \ 0.877307$ $b=\ \ 0.551360$	18.9120	0
$u=\ \ 1.97498+1.71262I$ $a=-0.304781+0.587751I$ $b=\ \ 0.05752-2.27275I$	$14.2364+2.5672I$	0
$u=\ \ 1.97498-1.71262I$ $a=-0.304781-0.587751I$ $b=\ \ 0.05752+2.27275I$	$14.2364-2.5672I$	0

II. $\boldsymbol{I_2^u = \langle -u^8 + 2u^7 + \cdots + b - 1,\ -3u^8 + 4u^7 + \cdots + a - 6,\ u^9 - u^8 + 2u^7 - u^6 + 3u^5 - u^4 + 2u^3 + u + 1\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 3u^8 - 4u^7 + 8u^6 - 7u^5 + 13u^4 - 9u^3 + 11u^2 - 6u + 6 \\ u^8 - 2u^7 + 3u^6 - 3u^5 + 4u^4 - 4u^3 + 3u^2 - 2u + 1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 3u^8 - 4u^7 + 8u^6 - 7u^5 + 13u^4 - 9u^3 + 10u^2 - 6u + 5 \\ u^8 - 2u^7 + 3u^6 - 3u^5 + 4u^4 - 4u^3 + 2u^2 - 2u + 1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u^4 + u^2 + 1 \\ u^4 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^6 - u^4 - 2u^2 - 1 \\ -u^8 - 2u^6 - 2u^4 - 2u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^2 - 1 \\ -u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 3u^8 - 4u^7 + 8u^6 - 7u^5 + 13u^4 - 9u^3 + 11u^2 - 6u + 6 \\ u^8 - 2u^7 + 3u^6 - 3u^5 + 4u^4 - 4u^3 + 3u^2 - 2u + 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 45u^8 - 63u^7 + 119u^6 - 104u^5 + 184u^4 - 133u^3 + 157u^2 - 83u + 73$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^9 - 5u^8 + 12u^7 - 15u^6 + 9u^5 + u^4 - 4u^3 + 2u^2 + u - 1$
c_2	$u^9 + u^8 - 2u^7 - 3u^6 + u^5 + 3u^4 + 2u^3 - u - 1$
c_3	$u^9 + u^8 + 2u^7 + u^6 + 3u^5 + u^4 + 2u^3 + u - 1$
c_4	$u^9 - u^8 - 2u^7 + 3u^6 + u^5 - 3u^4 + 2u^3 - u + 1$
c_5	$u^9 + 3u^8 + 8u^7 + 13u^6 + 17u^5 + 17u^4 + 12u^3 + 6u^2 + u - 1$
c_6	$u^9 - u^8 + 2u^7 - u^6 + 3u^5 - u^4 + 2u^3 + u + 1$
c_7, c_{10}	u^9
c_8	$u^9 - 3u^8 + 8u^7 - 13u^6 + 17u^5 - 17u^4 + 12u^3 - 6u^2 + u + 1$
c_9	$(u-1)^9$
c_{11}, c_{12}	$(u+1)^9$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^9 - y^8 + 12y^7 - 7y^6 + 37y^5 + y^4 - 10y^2 + 5y - 1$
c_2, c_4	$y^9 - 5y^8 + 12y^7 - 15y^6 + 9y^5 + y^4 - 4y^3 + 2y^2 + y - 1$
c_3, c_6	$y^9 + 3y^8 + 8y^7 + 13y^6 + 17y^5 + 17y^4 + 12y^3 + 6y^2 + y - 1$
c_5, c_8	$y^9 + 7y^8 + 20y^7 + 25y^6 + 5y^5 - 15y^4 + 22y^2 + 13y - 1$
c_7, c_{10}	y^9
c_9, c_{11}, c_{12}	$(y-1)^9$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.140343+0.966856I$ $a=\quad 0.920144-0.598375I$ $b=-1.004430+0.297869I$	$0.13850+2.09337I$	$-6.65973-4.50528I$
$u=-0.140343-0.966856I$ $a=\quad 0.920144+0.598375I$ $b=-1.004430-0.297869I$	$0.13850-2.09337I$	$-6.65973+4.50528I$
$u=-0.628449+0.875112I$ $a=-0.590648-0.449402I$ $b=-0.275254+0.816341I$	$-2.26187+2.45442I$	$-9.69685-4.13179I$
$u=-0.628449-0.875112I$ $a=-0.590648+0.449402I$ $b=-0.275254-0.816341I$	$-2.26187-2.45442I$	$-9.69685+4.13179I$
$u=\quad 0.796005+0.733148I$ $a=-0.719281-0.119276I$ $b=\quad 0.070080-0.850995I$	$-6.01628+1.33617I$	$-13.00050-1.13735I$
$u=\quad 0.796005-0.733148I$ $a=-0.719281+0.119276I$ $b=\quad 0.070080+0.850995I$	$-6.01628-1.33617I$	$-13.00050+1.13735I$
$u=\quad 0.728966+0.986295I$ $a=-0.365868+0.247975I$ $b=-0.195086-0.635552I$	$-5.24306-7.08493I$	$-11.6081+10.4867I$
$u=\quad 0.728966-0.986295I$ $a=-0.365868-0.247975I$ $b=-0.195086+0.635552I$	$-5.24306+7.08493I$	$-11.6081-10.4867I$
$u=-0.512358$ $a=\quad 14.5113$ $b=\quad 3.80937$	-2.84338	193.930

III. $\boldsymbol{I_3^u =}$
$\boldsymbol{\langle -2u^2a-au-u^2+b-u,\ -2u^2a+a^2-au-11u^2-2a-5u-19,\ u^3+u^2+2u+1\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} a \\ 2u^2a + au + u^2 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^2a - au - 3u^2 - a - 2u - 4 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^2a - au - 3u^2 - a - 2u - 4 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -2u^2a - 2au - 4u^2 - a - 3u - 5 \\ 2u^2a + au + u^2 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u \\ -u^2 - u - 1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^2 - 1 \\ -u^2 - u - 1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -1 \\ -u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^2a + au + u^2 + a + u \\ -u^2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -12u^2a - 21u^2 - 3a - 13u - 44$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3	$(u^3 - u^2 + 2u - 1)^2$
c_2	$(u^3 + u^2 - 1)^2$
c_4	$(u^3 - u^2 + 1)^2$
c_5, c_8	u^6
c_6	$(u^3 + u^2 + 2u + 1)^2$
c_7, c_9	$(u^2 + u - 1)^3$
c_{10}, c_{11}, c_{12}	$(u^2 - u - 1)^3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_6	$(y^3 + 3y^2 + 2y - 1)^2$
c_2, c_4	$(y^3 - y^2 + 2y - 1)^2$
c_5, c_8	y^6
c_7, c_9, c_{10} c_{11}, c_{12}	$(y^2 - 3y + 1)^3$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.215080 + 1.307140I$ $a = -1.284420 - 0.112842I$ $b = 2.68975 + 0.90979I$	$2.03717 + 2.82812I$	$-27.3018 - 15.7639I$
$u = -0.215080 + 1.307140I$ $a = -0.255377 + 0.295424I$ $b = -1.027390 - 0.347508I$	$-5.85852 + 2.82812I$	$-12.61597 - 1.90115I$
$u = -0.215080 - 1.307140I$ $a = -1.284420 + 0.112842I$ $b = 2.68975 - 0.90979I$	$2.03717 - 2.82812I$	$-27.3018 + 15.7639I$
$u = -0.215080 - 1.307140I$ $a = -0.255377 - 0.295424I$ $b = -1.027390 + 0.347508I$	$-5.85852 - 2.82812I$	$-12.61597 + 1.90115I$
$u = -0.569840$ $a = -3.52133$ $b = -0.525405$	-2.10041	-19.1260
$u = -0.569840$ $a = 5.60092$ $b = 0.200687$	-9.99610	-82.0390

IV. $I_1^v = \langle a,\ 5v^2 + 7b - 49v + 11,\ v^3 - 10v^2 + 5v - 1\rangle$

(i) Arc colorings

$$a_4 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ -\frac{5}{7}v^2 + 7v - \frac{11}{7} \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ -\frac{2}{7}v^2 + 3v - \frac{17}{7} \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -\frac{2}{7}v^2 + 3v - \frac{10}{7} \\ -\frac{2}{7}v^2 + 3v - \frac{17}{7} \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -1 \\ -\frac{2}{7}v^2 + 3v - \frac{17}{7} \end{pmatrix}$$
$$a_3 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} \frac{5}{7}v^2 - 7v + \frac{25}{7} \\ v^2 - 10v + 5 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -\frac{5}{7}v^2 + 8v - \frac{25}{7} \\ -v^2 + 10v - 5 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -\frac{5}{7}v^2 + 7v - \frac{25}{7} \\ -v^2 + 10v - 5 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -\frac{5}{7}v^2 + 7v - \frac{11}{7} \\ -\frac{5}{7}v^2 + 7v - \frac{11}{7} \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{30}{7}v^2 - 33v + \frac{3}{7}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^3$
c_3, c_6	u^3
c_4	$(u+1)^3$
c_5	u^3+3u^2+2u-1
c_7	u^3-u^2+2u-1
c_8	u^3-3u^2+2u+1
c_9	u^3+u^2-1
c_{10}	u^3+u^2+2u+1
c_{11}, c_{12}	u^3-u^2+1

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^3$
c_3, c_6	y^3
c_5, c_8	$y^3 - 5y^2 + 10y - 1$
c_7, c_{10}	$y^3 + 3y^2 + 2y - 1$
c_9, c_{11}, c_{12}	$y^3 - y^2 + 2y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$v = 0.258045 + 0.197115I$ $a = 0$ $b = 0.215080 + 1.307140I$	$1.37919 - 2.82812I$	$-7.96807 - 6.06881I$
$v = 0.258045 - 0.197115I$ $a = 0$ $b = 0.215080 - 1.307140I$	$1.37919 + 2.82812I$	$-7.96807 + 6.06881I$
$v = 9.48391$ $a = 0$ $b = 0.569840$	-2.75839	72.9360

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u-1)^3(u^3-u^2+2u-1)^2$ $\cdot(u^9-5u^8+12u^7-15u^6+9u^5+u^4-4u^3+2u^2+u-1)$ $\cdot(u^{23}+23u^{22}+\cdots+12783u+1)$
c_2	$(u-1)^3(u^3+u^2-1)^2(u^9+u^8-2u^7-3u^6+u^5+3u^4+2u^3-u-1)$ $\cdot(u^{23}-7u^{22}+\cdots-113u-1)$
c_3	$u^3(u^3-u^2+2u-1)^2(u^9+u^8+2u^7+u^6+3u^5+u^4+2u^3+u-1)$ $\cdot(u^{23}-4u^{22}+\cdots-36u+8)$
c_4	$(u+1)^3(u^3-u^2+1)^2(u^9-u^8-2u^7+3u^6+u^5-3u^4+2u^3-u+1)$ $\cdot(u^{23}-7u^{22}+\cdots-113u-1)$
c_5	$u^6(u^3+3u^2+2u-1)$ $\cdot(u^9+3u^8+8u^7+13u^6+17u^5+17u^4+12u^3+6u^2+u-1)$ $\cdot(u^{23}+3u^{22}+\cdots-32u-64)$
c_6	$u^3(u^3+u^2+2u+1)^2(u^9-u^8+2u^7-u^6+3u^5-u^4+2u^3+u+1)$ $\cdot(u^{23}-4u^{22}+\cdots-36u+8)$
c_7	$u^9(u^2+u-1)^3(u^3-u^2+2u-1)(u^{23}+5u^{22}+\cdots+4608u-512)$
c_8	$u^6(u^3-3u^2+2u+1)$ $\cdot(u^9-3u^8+8u^7-13u^6+17u^5-17u^4+12u^3-6u^2+u+1)$ $\cdot(u^{23}+3u^{22}+\cdots-32u-64)$
c_9	$((u-1)^9)(u^2+u-1)^3(u^3+u^2-1)(u^{23}-14u^{22}+\cdots+247u+1)$
c_{10}	$u^9(u^2-u-1)^3(u^3+u^2+2u+1)(u^{23}+5u^{22}+\cdots+4608u-512)$
c_{11}, c_{12}	$((u+1)^9)(u^2-u-1)^3(u^3-u^2+1)(u^{23}-14u^{22}+\cdots+247u+1)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y-1)^3(y^3+3y^2+2y-1)^2$ $\cdot (y^9-y^8+12y^7-7y^6+37y^5+y^4-10y^2+5y-1)$ $\cdot (y^{23}-39y^{22}+\cdots+163240279y-1)$
c_2, c_4	$(y-1)^3(y^3-y^2+2y-1)^2$ $\cdot (y^9-5y^8+12y^7-15y^6+9y^5+y^4-4y^3+2y^2+y-1)$ $\cdot (y^{23}-23y^{22}+\cdots+12783y-1)$
c_3, c_6	$y^3(y^3+3y^2+2y-1)^2$ $\cdot (y^9+3y^8+8y^7+13y^6+17y^5+17y^4+12y^3+6y^2+y-1)$ $\cdot (y^{23}-12y^{22}+\cdots+7568y-64)$
c_5, c_8	$y^6(y^3-5y^2+10y-1)$ $\cdot (y^9+7y^8+20y^7+25y^6+5y^5-15y^4+22y^2+13y-1)$ $\cdot (y^{23}+37y^{22}+\cdots+234496y-4096)$
c_7, c_{10}	$y^9(y^2-3y+1)^3(y^3+3y^2+2y-1)$ $\cdot (y^{23}-111y^{22}+\cdots+71041024y-262144)$
c_9, c_{11}, c_{12}	$(y-1)^9(y^2-3y+1)^3(y^3-y^2+2y-1)$ $\cdot (y^{23}-48y^{22}+\cdots+59963y-1)$